

MAY 23 2006

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A multifunction printed sheets interface system comprising:

plural sheet input areas,
plural sheet outputs areas,
a sheet position sensing system, and

a sheet transporting system comprising a plane having first and second angularly spaced sides, said sheet transporting system comprising independently operable sheet transports and providing selectable sheet translation in a the plane to selectably transport sheets from selected ones of said plural sheet input areas to selected ones of said plural sheet outputs areas so as to provide selectable sheet feeding from selected sheet input areas to selected sheet outputs areas, said sheet transports providing variable angle driving for selectable sheet rotation and translation of selected sheets in the plane whereby said sheets are selectably transported contemporaneously transportable in different directions towards said plural sheet outputs areas, a first of the sheet outputs areas being adjacent the first angularly spaced side of the plane and a second of said sheet outputs areas being adjacent the second angularly spaced side of the plane.

2. (Previously Presented) The system of claim 8, wherein said sheet transporting system additionally provides selectable sheet rotation of selected sheets.

3. (Previously Presented) The multifunction printed sheets interface system of claim 1, wherein said sheet transporting system additionally provides selectable sheet

merging in a selected sheet sequence of sheets from said plural sheet input areas to a selected said sheet outputs areas.

4. (Previously Presented) The multifunction printed sheets interface system of claim 8, wherein said sheet transporting system comprises a multiplicity of spaced and independently operable variable-sheet-feeding-direction sheet transports.

5. (Previously Presented) The multifunction printed sheets interface system of either one of claims 1 and 3, wherein said sheet transporting system is a generally planar sheet feeding table larger than the dimensions of any sheet to be fed thereon for simultaneous plural sheet variable transport thereon.

6. (Previously Presented) The multifunction printed sheets interface system of either one of claims 1 and 3, wherein said sheet transporting system has a large planar area with a multiplicity of spaced apart independently operable variable sheet feeding direction and sheet velocity sheet transports, said large planar area being substantially larger than the dimensions of any sheet to be fed thereon to allow simultaneous plural sheet variable transport thereon by said multiplicity of spaced apart independently operable variable sheet feeding direction and sheet velocity sheet transports, said sheets being sensed thereon by said sheet position sensing system, and said sheet position sensing system controlling said multiplicity of spaced apart independently operable variable sheet feeding direction and sheet velocity sheet transports.

7. (Previously Presented) The multifunction printed sheets interface system of claim 1, wherein a plurality of said sheet transports are each closer to four other sheet transports than the smallest sheet to be fed.

8. (Currently Amended) A system comprising:
a plurality of printers;

a plurality of sheet processing systems; and

a multifunction printed sheets interface system comprising:

a plurality of sheet input areas which receive printed sheets from the plurality of printers, each of the printers feeding printed sheets to a respective one of the sheet input areas,

a plurality of sheet outputs areas which provide plural outputs to different ones of the sheet processing systems, first and second of the sheet input areas being positioned relative to first and second of the sheet outputs areas such that a path of a sheet transported between the first input area and the first outputs area crosses a path of a sheet transported between the second input area and the second outputs area.

a sheet position sensing system, and

a sheet transporting system, said sheet transporting system providing selectable sheet translation to selectably transport sheets from selected ones of said plural sheet input areas to selected ones of said plural sheet outputs areas so as to provide selectable sheet feeding from selected printers to selected sheet processing systems.

9. (Previously Presented) The system of claim 8, wherein said sheet transporting system additionally provides selectable sheet merging in a selected sheet sequence of sheets from said plurality of printers to a selected processing system.

10. (Previously Presented) The system of claim 8, wherein said sheet transporting system comprises a multiplicity of spaced and independently operable sheet transports.

11. (Previously Presented) The system of claim 10, wherein a plurality of said sheet transports are each closer to four other sheet transports than the smallest sheet to be fed.

12. (Previously Presented) The system of claim 10, wherein said sheet transports are configured for variable angle driving.

13. (Previously Presented) The system of claim 10, wherein said printed sheets interface system comprises a generally planar sheet feeding table larger than the dimensions of any sheet to be fed thereon for simultaneous variable transport of a plurality of sheets thereon.

14. (Currently Amended) A method comprising:
printing sheets on a plurality of printers;
feeding the printed sheets from the plurality of printers to a plurality of spaced respective input areas of a printed sheets interface system;
transporting the printed sheets from the input areas to selected ones of a plurality of spaced output areas of the printed sheets interface system with a plurality of sheet transports whereby a sheet transported between a first of the input areas and a first of the outputs areas crosses a path of a sheet transported between a second of the input areas and a second of the outputs areas; and
sensing a position of the printed sheets during transporting.

15. (Previously Presented) The method of claim 14, wherein said transporting includes selectively transporting sheets in a first direction, a second direction perpendicular to the first direction, and a third direction angularly spaced between the first and second directions.

16. (New) A multifunction printed sheets interface system comprising:

plural sheet input areas,
plural sheet outputs areas,
a sheet position sensing system, and

a sheet transporting system, said sheet transporting system comprising independently operable sheet transports and providing selectable sheet translation in a plane to selectably transport sheets from selected ones of said plural sheet input areas to selected ones of said plural sheet outputs areas and a controller which independently controls the sheet transports to provide selectable sheet feeding from any one of the sheet input areas to any one of the sheet outputs areas, said sheet transports providing variable angle driving for selectable sheet rotation and translation of selected sheets in the plane whereby said sheets are selectably transported.